

CHARLES COUNTY



Selection of Focus Area

In 1995, the Partnership for a Healthier Charles County was formed to identify the community’s health problems and to find solutions using input from citizens, providers, agencies and other concerned individuals. To accomplish this goal, a community-wide needs assessment was completed in 1995 using the Planned Approach to Community Health (PATCH) process. Seven core priorities were determined: Cardiovascular Disease, Cancer, Motor Vehicle Crashes, Special Populations (including the mentally and physically challenged and HIV/AIDS individuals), Substance Abuse, Mental Health, and Violence.

Another community needs assessment was completed in 2000. This reinforced that many of the problems identified in 1995 still remain issues that our community must address along with access to care, public/provider health education, and service development issues. Additionally, it became clear that there was another pressing problem that needed immediate attention and review: the infant mortality rate for Charles County had risen to place Charles County second in the State. This problem became the focus of the Health Improvement Plan.

DEMOGRAPHIC OVERVIEW

Estimated Population, by Race – 1998			
Total			117,920
White			74.0%
Other			26.0%
Estimated Population, by Age – 1998			
Under 1	1,660	18-44	50,150
1-4	7,210	45-64	23,730
5-17	26,360	65+	8,850
All causes Mortality Rate (age-adjusted, per 100,000 population) 1996-1998			527.7
Infant Mortality Rate 1995-1999			7.3
Estimated Mean Household Income – 1999			\$68,500
Estimated Median Household Income – 1999			\$60,600
Civilian Unemployment Rate, Annual Average – 1999			2.5
Labor force (Top 4) – 1995			
Retail Trade	12,300	Government (Federal, Military)	8,300
Services	12,100	State & Local Government	4,500

Sources: Maryland Vital Statistics, 1999
 Maryland Department of Planning, 1995, 1998, 1999

Maternal and Infant Health

Problem

In 1913, Julia Lathrop, of the Children's Bureau (a federal child advocacy organization), stated, "Infant mortality is the most sensitive index we possess of social welfare." This continues to be true today. The infant mortality rate serves as a measure of a community's social and economic well-being as well as its overall health. It is also a measure of the organization and delivery of a community's health and human services resources. Within Charles County, the infant mortality rate had for a number of years remained stable, with slight fluctuations. However, in FY1997, we began to see an increase, especially among the African-American population. Then, in FY1998, there was a dramatic increase that was identified by the County's Fetal Infant Mortality Review (FIMR) committee. FIMR is a community-based, action-oriented process that leads to improvement in health and other family services. When the FIMR Committee began to look for common issues in these infant deaths, it found that many of the women giving birth had preexisting health conditions, which in many cases led to infant deaths due to prematurity. At the same time, the Health Department began a review of the same issue with an in-house team composed of the Health Officer, Deputy Health Officer, Improved Pregnancy Outcomes (IPO) Coordinator, Director of Community Health and Prevention, and the Epidemiologist. The problem of a high infant mortality rate and the need for pre-conceptual health education was identified again as an issue needing to be addressed by the community needs assessment session with the Partnerships for a Healthier Charles County. Along with these three groups, the Healthy Maryland 2010 Initial Steering Committee for Southern Maryland analyzed the morbidity, mortality, and behavioral trends and rates for the region. Infant mortality and no prenatal care were listed as high priority health concerns for Charles County.

Determinants

The Maryland Partnership for Children, Youth and Families (MPCYF) notes that a variety of factors influence mortality: maternal health, quality and access to medical care, socio-economic factors, psychosocial factors, and public health practices. Also, MPCYF notes that low birth weight is the primary cause of infant mortality and that low birth weight babies have a high probability of experiencing developmental delays.

In 1999, the March of Dimes reported that low birth weight affects one in every 14 babies born each year in the United States and is related to 60% of infant deaths. The March of Dimes also notes that socio-economic factors such as low income and lack of education are associated with increased risk of having a low birth weight baby, although the underlying reasons are not understood. The more common occurrence of bacterial infection of the lower reproductive tract appears to explain some of this increased risk since low-income mothers may be unable to afford proper healthcare and nutrition. Women under age 17 and over age 35, unmarried mothers and women who have had several children quickly are at increased risk of having low birth weight babies. Teenagers may not practice good health habits. Women who experience excessive stress and other social, economic and psychological problems and victims of domestic violence are at increased risk of having a low birth weight baby.

The National Clearinghouse for Alcohol and Drug Information reports that the use of alcohol, tobacco and/or other drugs during pregnancy continues to be a leading preventable cause of mental, physical, and psychological impairments and problems in infants and children. According to a recent National Institute on Drug Abuse study estimating the use of selected substances during pregnancy: 5.5% of women surveyed reported using illicit drugs during pregnancy; 18.8% of women surveyed reported using alcohol during pregnancy; and 20.4% of women surveyed reported using tobacco during pregnancy. This study concluded that the cost of alcohol, tobacco, and other drugs during pregnancy is high to society in both human and economic terms and recommended prevention and education interventions.

In 1996, Charles County had the lowest infant death rate for the State of Maryland. Since that time, however, the number of infant deaths has steadily increased. Although the numbers are relatively small, they impact on the infant mortality rate greatly bringing our 1998 infant death rate to second highest in the State. Trends early on demonstrated a disparity between the white and African-American populations, with the African-American population demonstrating a much higher rate than that of the white population. Even though, by 1998, this disparity was narrowing, Charles County's neonatal mortality rate remained the second highest in the state.

The Department of Health and Mental Hygiene's Division of Health Statistics reports the following information in its *Charles County Vital Statistic Profile, 1997 and 1998*:

- The birth rate per 1,000 population is 14.3 for Charles County, compared to a statewide rate of 13.8 in 1997. In 1998, Charles County's birth rate was again 14.3 compared to 14.0 for the State, making Charles County the sixth highest in the State. (Baseline: 7.2% in 1998)
- Births to adolescents under 18 years of age accounted for 3.8% of births in Charles County, compared to a statewide average of 4.2% in 1997. In 1998, the County rate was 4.0% compared to 4.0%, also for the State.
- In 1997, Charles County's percentage of women receiving first trimester prenatal care was less than the statewide average for both white and African-American populations. This was still true in 1998, with a rate of 86.4% for the County compared to 87.9% for the State.
- Charles County's percentage of low birth weight infants among whites was greater than the statewide average in 1997; the percentage of low birth weight infants among African-Americans was less than the statewide average. Charles County's percentages of low and very low birth weight infants for both populations were less than the statewide average in 1997. Still true in 1998, with the low birth weight rate even lower than the state.
- The neonatal mortality rate and the perinatal mortality rate for both populations were less than the statewide rates in 1997. In 1998, the neonatal rate increased to 10.1 compared to 6.3 for the State, making Charles County the second highest rate in the State.

- In 1998, Charles County's rate of late or no prenatal care was 3.0% compared to 2.9% for the State, placing the County eighth-highest in the State for late or no prenatal care.
- Local review of data and the matching of birth and death certificates for infants who died indicates that pre-term births are a significant problem leading to neonatal deaths.

The FY1999 Maryland and Charles County Prenatal Risk Assessments demonstrate the existence of possible determinants of infant mortality among Charles County pregnant women. The results of 340 risk assessments by eight county physicians indicated the following:

- Sexually Transmitted Diseases were the number one current medical condition listed .
- Cesarean sections were the number one factor listed under obstetrical history.
- Only 61% of the 340 women screened were questioned regarding abuse or violence, meaning that 39% were denied the opportunity to seek help with this issue.
- Six out of eight providers listed smoking as the number one psychosocial risk.
- Other factors listed included starting prenatal care late, having less than a 12th grade education, lack of emotional support, drug use and alcohol use, and it being less than one year since one's last delivery.

Objective 1 - Reduce the infant mortality rate to no more than 5 per 1,000 live births.
(Baseline: 13 per 1000 live births in 1998)

Objective 2 - Reduce the fetal death rate to no more than 5 per 1,000 live births.
(Baseline: 10 per 1000 total deliveries in 1998)

Objective 3 - Increase to 90% the proportion of all pregnant women who begin prenatal care in the first trimester of pregnancy. (Baseline: 86.4% in 1998)

Objective 4 - Reduce low birth weight to an incidence of no more than 5% of live births and very low birth weight to no more than 1% of live births. (Baselines: 7.2% and 1.4% in 1998)

Action Steps

Community Involvement

- ⇒ Continue FIMR review of infant deaths and analysis of related factors.
- ⇒ Coordinate efforts of FIMR and Child Fatality Review Board to identify areas of common consensus and gaps in service delivery.
- ⇒ Initiate education/outreach community action components of the FIMR process.

Public Health Education for Providers, Physicians, and Community

- ⇒ Provide educational opportunities for the medical community and other providers of care to women regarding the pre-conceptual health needs of women, need for early prenatal care, and the need for appropriate STD screenings during pregnancy.
- ⇒ Initiate a media campaign to inform the community and young women regarding the need for pre-conceptual health care and the problem of infant mortality.
- ⇒ Develop an educational program aimed at grandparents to involve them in educating and motivating their grandchildren toward healthier lifestyles.
- ⇒ Engage the faith community in efforts to reach the community.
- ⇒ Work with the school health nurses to address problem of teen pregnancy and to encourage healthy lifestyles.

Public Health Services

- ⇒ Work with the Healthy Families Program in providing intensive support to first time mothers and with the Teen Pregnancy Home Visiting Program, which focuses on educating the teens about the developmental needs of their children as well as looking at the developmental needs of the teens themselves.
- ⇒ Maintain the Healthy Start home visiting program, emphasizing the reduction of risk factors and the prevention of pre-term delivery to pregnant women.
- ⇒ Continue prenatal education classes provided to the community.
- ⇒ Work with physicians by personal visits to their practices and provide a regular newsletter highlighting the issues with suggestions for physician encouragement and motivation of clients to better and healthier lifestyles.

Assessment

- ⇒ Continue the Health Department analysis of infant mortality statistics and the matching of birth and death certificates.
- ⇒ Continue FIMR monitoring of the infant mortality problem and involvement of the community in resolving the problem.
- ⇒ Continue the work of the Improved Pregnancy Outcome (IPO) grant.
- ⇒ Continue a review of medical records by IPO coordinator.

Partners

Charles County Health Department • Fetal Infant Mortality Review Board • Partnership for a Healthier Charles County

References

Maryland Department of Health and Mental Hygiene, Division of Health Statistics. (1996-1998). *Maryland vital statistics annual report*.

The Annie E. Casey Foundation. (1999). *Kids count data book*. Baltimore, MD: Annie E. Casey Foundation.

Maryland Partnership for Children, Youth and Families. (1998). *Maryland's Results for Child Well-Being*.

Charles County Department of Health. (1999-2000). *Community needs assessment*.

Charles County Health Department. Review of birth and death certificates.

Maryland Department of Health and Mental Hygiene, Office of Maternal and Child Health. (1999). Maryland Prenatal Risk Assessment.

Cross-Reference Table for Charles County

See Also

Maternal and Infant Health 96